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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,611	03/15/2004	Moshe Finarov	1811.70105	1803
7590 03/15/2006 Lawrence J. Crain Suite 2500 300 South Wacker Drive Chicago, IL 60606			EXAMINER ROSE, ROBERT A	
			ART UNIT 3723	PAPER NUMBER

DATE MAILED: 03/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/800,611	Applicant(s) FINAROV, MOSHE	
	Examiner Robert Rose	Art Unit 3723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-46 is/are pending in the application.
- 4a) Of the above claim(s) 32, 33, 41, 42 and 45 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26-31, 34-40, 43, 44 and 46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-25 have been canceled.
2. Claims 32-33, 41-42, and 45 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on May 23, 2005.
3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 26-31, 34-40, 43-44, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li et al('492) in view of Sandhu et al(US 5658183). Li et al disclose a method and apparatus for processing of wafers comprising substantially all of the subject matter set forth in applicant's claims above. The wafer is processed by a cmp machine or etching machine(column 7, lines 8-13) and the thickness of a layer is monitored during the processing under control of an endpoint signal. Li et al disclose a sampling technique for processing wafers in which the total processing time is determined by adding an overprocessing time to the reference point processing time to arrive at the total processing time necessary to establish the endpoint. After processing,

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the thickness of the layer is measured and the difference between the desired thickness and actual thickness is used to adjust the endpoint signal for the next wafer to be processed. The ratio of the difference between the desired thickness and actual thickness is used to determine an adjusted time period for processing to achieve the desired thickness, and the value of the endpoint signal corresponding to the changed processing time is used to correct the endpoint signal for the next wafer. Sandhu et al disclose a method of endpoint detection for wafer processing which utilizes optical sensors to measure the post cmp thickness of a thin film layer, and uses that measurement to adjust the operational parameters of the next wafer to be processed. To employ optical sensor means for measuring film thickness in the method and apparatus of Li et al('492) to arrive at the endpoint signal would have been obvious in view of Sandhu et al. To further adjust the endpoint signal for the next wafer on the basis of the thickness measurement, would have been obvious in view of Sandhu et al.

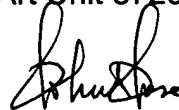
5. Applicant's arguments with respect to claims 26-31, 34-40, 43-44, and 46 have been considered but are moot in view of the new ground(s) of rejection. Sandhu et al relies upon a feedback to adjust the polishing parameters of the next wafer to be processed. This is deemed a sufficient teaching to modify Li et al('492) to control either the reference point determination, or overpolishing time, for the next wafer to be processed.

6. In view of the new grounds of rejection not necessitated by Applicant's response, this action is not made final.

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7. Any inquiry concerning this communication should be directed to Robert Rose at telephone number (571) 272-4494.

Robert Rose
Primary Examiner
Art Unit 3723

A handwritten signature in black ink, appearing to read 'Robert Rose', is positioned below the printed name and title.

Rr

March 3, 2006.